

## WEST Search History

DATE: Tuesday, March 28, 2006

Hide?	<u>Set</u> <u>Name</u>	<u>Query</u>	<u>Hit</u> <u>Count</u>
	<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=ADJ</i>		
<input type="checkbox"/>	L17	L2 same L16	1
<input type="checkbox"/>	L16	(gene or sequence or polynucleotide)same L15	5
<input type="checkbox"/>	L15	((sphingosine-1-phosphate with phosphatase) (dihydrosphingosine-1-phosphate with phosphatase) or YSR2)	12
<input type="checkbox"/>	L14	l2 same L13	2
<input type="checkbox"/>	L13	(gene or sequence or polynucleotide)same L12	8292
<input type="checkbox"/>	L12	((sphingosine with kinase) or SK or LCB4)	890963
<input type="checkbox"/>	L11	l2 same L10	6
<input type="checkbox"/>	L10	(gene or sequence or polynucleotide)same L9	51
<input type="checkbox"/>	L9	((dihydrosphingosine-1-phosphate with lyase) or (sphingosine-1-phosphate with lyase) or DPL1)	146
<input type="checkbox"/>	L8	(sphingolipid or sphingo\$7)same L7	7
<input type="checkbox"/>	L7	express\$5 same L4	41
<input type="checkbox"/>	L6	L1 same L4	5
<input type="checkbox"/>	L5	L2 same L4	1
<input type="checkbox"/>	L4	(gene or sequence or polynucleotide)same L3	131
<input type="checkbox"/>	L3	(sphk1 or sk1 or (spingosine with kinase\$3))	1055
<input type="checkbox"/>	L2	(sphingolipid or sphingo\$7)same L1	94
<input type="checkbox"/>	L1	((mutant with yeast with strain) or (mutant with strain) or (yeast with strain))	33230

END OF SEARCH HISTORY

=> index bioscience medicine

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE, AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS, CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB, DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 13:51:19 ON 28 MAR 2006

73 FILES IN THE FILE LIST IN STNINDEX

=> s ((mutant(w)yeast(w)strain#)or (mutant(w)strain#)or (yeast(w)strain#))

25 FILE ADISCTI  
35 FILE ADISINSIGHT  
4 FILE ADISNEWS  
2713 FILE AGRICOLA  
47 FILE ANABSTR  
60 FILE ANTE  
57 FILE AQUALINE  
406 FILE AQUASCI  
2946 FILE BIOENG  
17326 FILE BIOSIS  
3970 FILE BIOTECHABS  
3970 FILE BIOTECHDS  
7582 FILE BIOTECHNO  
3588 FILE CABA  
20816 FILE CAPLUS  
1174 FILE CEABA-VTB  
100 FILE CIN  
105 FILE CONFSCI  
34 FILE CROPB  
237 FILE CROPU  
20 FILES SEARCHED...  
125 FILE DDFB  
385 FILE DDFU  
5012 FILE DGENE  
1623 FILE DISSABS  
125 FILE DRUGB  
713 FILE DRUGU  
115 FILE EMBAL  
10586 FILE EMBASE  
7179 FILE ES BIOBASE  
477 FILE FEDRIP  
970 FILE FROSTI  
3377 FILE FSTA  
1398 FILE GENBANK  
36 FILES SEARCHED...  
19 FILE HEALSAFE  
1349 FILE IFIPAT  
7 FILE IMSDRUGNEWS  
15 FILE IMSRESEARCH  
928 FILE JICST-EPLUS  
20 FILE KOSMET  
9548 FILE LIFESCI  
28380 FILE MEDLINE  
66 FILE NIOSHTIC  
173 FILE NTIS  
43 FILE OCEAN  
5075 FILE PASCAL  
18 FILE PCTGEN  
13 FILE PHAR  
4 FILE PHARMAML  
68 FILE PHIN  
536 FILE PROMT  
61 FILE PROUSDDR  
2 FILE RDISCLOSURE  
11453 FILE SCISEARCH  
11681 FILE TOXCENTER  
13500 FILE USPATFULL  
847 FILE USPAT2

5 FILE VETB  
102 FILE VETU  
66 FILES SEARCHED...  
53 FILE WATER  
1857 FILE WPIDS  
17 FILE WPIFV  
1857 FILE WPINDEX  
30 FILE IPA  
94 FILE NAPRALERT  
353 FILE NLDB

65 FILES HAVE ONE OR MORE ANSWERS, 73 FILES SEARCHED IN STNINDEX

L1 QUE ((MUTANT(W) YEAST(W) STRAIN#) OR (MUTANT(W) STRAIN#) OR (YEAST(W) STRAIN#))

=> d rank

F1 28380 MEDLINE  
F2 20816 CAPLUS  
F3 17326 BIOSIS  
F4 13500 USPATFULL  
F5 11681 TOXCENTER  
F6 11453 SCISEARCH  
F7 10586 EMBASE  
F8 9548 LIFESCI  
F9 7582 BIOTECHNO  
F10 7179 ESBIOBASE  
F11 5075 PASCAL  
F12 5012 DGENE  
F13 3970 BIOTECHABS  
F14 3970 BIOTECHDS  
F15 3588 CABA  
F16 3377 FSTA  
F17 2946 BIOENG  
F18 2713 AGRICOLA  
F19 1857 WPIDS  
F20 1857 WPINDEX  
F21 1623 DISSABS  
F22 1398 GENBANK  
F23 1349 IFIPAT  
F24 1174 CEABA-VTB

=> file f1-f11, f15, f17-f19

FILE 'MEDLINE' ENTERED AT 13:55:23 ON 28 MAR 2006

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FILE 'WPIDS' ENTERED AT 13:55:23 ON 28 MAR 2006  
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=> s L1  
L2 154230 L1

=> s (sphingolipid# or sphingo?)(s)L2  
L3 351 (SPHINGOLIPID# OR SPHINGO?)(S) L2

=> s (sphk1 or sk1 or (sphingosine(w)kinase?))  
L4 5440 (SPHK1 OR SK1 OR (SPHINGOSINE(W) KINASE?))

=> s L3(s)L4  
L5 4 L3(S) L4

=> s (gene or sequence or polynucleotide or clone or recombinant)(s)L4  
9 FILES SEARCHED...  
L6 970 (GENE OR SEQUENCE OR POLYNUCLEOTIDE OR CLONE OR RECOMBINANT)(S)  
L4

=> s express/ (s)L6  
'EXPRESS/' IS NOT A VALID FIELD CODE  
For a list of field codes for the current file, enter "HELP SFIELDS"  
at an arrow prompt (=>).

=> s express?(s)L6  
13 FILES SEARCHED...  
L7 442 EXPRESS?(S) L6

=> s (sphingolipid# or sphingo?)(s)L7  
L8 234 (SPHINGOLIPID# OR SPHINGO?)(S) L7

=> s L8(s)L2  
L9 1 L8(S) L2

=> s ((dihydrosphingosine-1-phosphate(w)lyase) or (sphingosine-1-phosphate(w)lyase) or DPL1)  
10 FILES SEARCHED...  
L10 442 ((DIHYDROSPHINGOSINE-1-PHOSPHATE(W) LYASE) OR (SPHINGOSINE-1-PHOSPHATE(W) LYASE) OR DPL1)

=> s (gene or sequence or polynucleotide or clone or recombinant)(s)L10  
9 FILES SEARCHED...  
L11 172 (GENE OR SEQUENCE OR POLYNUCLEOTIDE OR CLONE OR RECOMBINANT)(S)  
L10

=> s L2(s)L11  
L12 21 L2(S) L11

=> s (sphingolipid# or sphingo?)(s)L12  
L13 21 (SPHINGOLIPID# OR SPHINGO?)(S) L12

=> s ((sphingosine(w)kinase#)or sk or LCB4)  
MISSING OPERATOR 'PHINGOSINE(WOKINASE#'  
The search profile that was entered contains terms or  
nested terms that are not separated by a logical operator.

=> s ((sphingosine(w)kinase#)or sk or LCB4)  
L14 94558 ((SPHINGOSINE(W) KINASE#) OR SK OR LCB4)

=> s (GENE OR SEQUENCE OR POLYNUCLEOTIDE OR CLONE OR RECOMBINANT)(S)L14  
9 FILES SEARCHED...

L15 16881 (GENE OR SEQUENCE OR POLYNUCLEOTIDE OR CLONE OR RECOMBINANT)(S)  
L14

=> s (sphingolipid# or sphingo?)(s)L15  
L16 463 (SPHINGOLIPID# OR SPHINGO?)(S) L15

=> s L16(s)L2  
L17 5 L16(S) L2

=> s ((sphingosine-1-phosphate(w)phosphatase#) or (dihydrosphingosine-1-phosphate(w)phosphatase#) or YSR2)  
10 FILES SEARCHED...

L18 223 ((SPHINGOSINE-1-PHOSPHATE(W) PHOSPHATASE#) OR (DIHYDROSPHINGOSIN  
E-1-PHOSPHATE(W) PHOSPHATASE#) OR YSR2)

=> s (GENE OR SEQUENCE OR POLYNUCLEOTIDE OR CLONE OR RECOMBINANT)(S)L18  
10 FILES SEARCHED...

L19 44 (GENE OR SEQUENCE OR POLYNUCLEOTIDE OR CLONE OR RECOMBINANT)(S)  
L18

=> s (sphingolipid# or sphingo?)(s)L19  
L20 37 (SPHINGOLIPID# OR SPHINGO?)(S) L19

=> s L20(s)L2  
L21 1 L20(S) L2

=> dup rem L13  
PROCESSING COMPLETED FOR L13  
L22 9 DUP REM L13 (12 DUPLICATES REMOVED)

=> dup rem L5  
PROCESSING COMPLETED FOR L5  
L23 4 DUP REM L5 (0 DUPLICATES REMOVED)

=> dup rem L17  
PROCESSING COMPLETED FOR L17  
L24 3 DUP REM L17 (2 DUPLICATES REMOVED)

=> d ibib abs L22 1-9

L22 ANSWER 1 OF 9 USPATFULL on STN  
ACCESSION NUMBER: 2005:254852 USPATFULL  
TITLE: Sphingosine-1-phosphate lyase polypeptides,  
polynucleotides and modulating agents and methods of  
use therefor  
INVENTOR(S): Saba, Julie D., Oakland, CA, UNITED STATES  
Fyrst, Henrik, Alameda, CA, UNITED STATES  
PATENT ASSIGNEE(S): Children's Hospital & Research Institute at Oakland,  
Oakland, CA, UNITED STATES (U.S. corporation)

NUMBER	KIND	DATE
PATENT INFORMATION: US 2005221346 A1 20051006		
APPLICATION INFO.: US 2004-979085 A1 20041101 (10)		
RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-53510, filed on 17 Jan 2002, GRANTED, Pat. No. US 6830881 Continuation-in-part of Ser. No. US 1999-356643, filed on 19 Jul 1999, GRANTED, Pat. No. US 6569666 Continuation-in-part of Ser. No. US 1997-939309, filed on 29 Sep 1997, GRANTED, Pat. No. US 6423527		
DOCUMENT TYPE: Utility		
FILE SEGMENT: APPLICATION		
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092, US		
NUMBER OF CLAIMS: 6		
EXEMPLARY CLAIM: 1-29		

LINE COUNT: 3225

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer are provided. Therapeutic compositions may comprise agents that modulate the expression or activity of a sphingosine-1-phosphate lyase (SPL). Such compositions may be administered to a mammal afflicted with cancer. Diagnostic methods and kits may employ an agent suitable for detecting alterations in endogenous SPL. Such methods and kits may be used to detect the presence of a cancer or to evaluate the prognosis of a known disease. SPL polypeptides, polynucleotides and antibodies are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 2 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2004:165347 USPATFULL

TITLE: Compositions and methods for the modulation of  
sphingolipid metabolism and/or signaling

INVENTOR(S): Saba, Julie D., Oakland, CA, UNITED STATES

PATENT ASSIGNEE(S): Children's Hospital and Research Institute at Oakland,  
Oakland, CA (U.S. corporation)

NUMBER KIND DATE

-----  
PATENT INFORMATION: US 2004126834 A1 20040701  
APPLICATION INFO.: US 2003-622011 A1 20030716 (10)  
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-348052, filed  
on 17 Jan 2003, PENDING Continuation-in-part of Ser.  
No. US 2002-53510, filed on 17 Jan 2002, PENDING

NUMBER DATE

-----  
PRIORITY INFORMATION: US 2002-349582P 20020117 (60)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH  
AVE, SUITE 6300, SEATTLE, WA, 98104-7092  
NUMBER OF CLAIMS: 31  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 5 Drawing Page(s)  
LINE COUNT: 7285

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer and muscular disorders are provided. Therapeutic compositions may comprise agents that modulate sphingolipid metabolism and/or signaling pathways. Such compositions may be administered to a mammal afflicted with cancer. Diagnostic methods and kits may employ an agent suitable for detecting alterations in endogenous genes involved in sphingolipid metabolism. Such methods and kits may be used to detect the presence of a cancer or to evaluate the prognosis of a known disease. Screens for identifying agents that modulate sphingolipid metabolism and/or signaling pathways are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 3 OF 9 USPATFULL on STN

ACCESSION NUMBER: 2003:312185 USPATFULL

TITLE: Compositions and methods for the modulation of  
sphingolipid metabolism and/or signaling

INVENTOR(S): Saba, Julie D., Oakland, CA, UNITED STATES

Fyrst, Henrik, Alameda, CA, UNITED STATES

PATENT ASSIGNEE(S): Children's Hospital & Research Institute at Oakland,  
Oakland, CA, UNITED STATES, 94609-1673 (non-U.S.  
corporation)

NUMBER KIND DATE

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PATENT INFORMATION: US 2003219782 A1 20031127  
APPLICATION INFO.: US 2003-348052 A1 20030117 (10)

NUMBER DATE

PRIORITY INFORMATION: US 2002-349582P 20020117 (60)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH  
AVE, SUITE 6300, SEATTLE, WA, 98104-7092  
NUMBER OF CLAIMS: 50  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 3 Drawing Page(s)  
LINE COUNT: 5792

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer and muscular disorders are provided. Therapeutic compositions may comprise agents that modulate sphingolipid metabolism and/or signaling pathways. Such compositions may be administered to a mammal afflicted with cancer. Diagnostic methods and kits may employ an agent suitable for detecting alterations in endogenous genes involved in sphingolipid metabolism. Such methods and kits may be used to detect the presence of a cancer or to evaluate the prognosis of a known disease. SPL polypeptides, polynucleotides and antibodies are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 4 OF 9 USPATFULL on STN  
ACCESSION NUMBER: 2003:251153 USPATFULL  
TITLE: Sphingosine-1-phosphate lyase polypeptides,  
polynucleotides and modulating agents and methods of  
use therefor  
INVENTOR(S): Saba, Julie D., Oakland, CA, UNITED STATES  
Fyrst, Henrik, Alameda, CA, UNITED STATES  
PATENT ASSIGNEE(S): Children's Hospital Oakland Research Institute,  
Oakland, CA, UNITED STATES, 94609-1673 (U.S.  
corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2003175939 A1 20030918  
US 6830881 B2 20041214  
APPLICATION INFO.: US 2002-53510 A1 20020117 (10)  
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-356643, filed  
on 19 Jul 1999, GRANTED, Pat. No. US 6569666  
Continuation-in-part of Ser. No. US 1997-939309, filed  
on 29 Sep 1997, GRANTED, Pat. No. US 6423527  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH  
AVE, SUITE 6300, SEATTLE, WA, 98104-7092  
NUMBER OF CLAIMS: 30  
EXEMPLARY CLAIM: 1  
LINE COUNT: 3339

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer are provided. Therapeutic compositions may comprise agents that modulate the expression or activity of a sphingosine-1-phosphate lyase (SPL). Such compositions may be administered to a mammal afflicted with cancer. Diagnostic methods and kits may employ an agent suitable for detecting alterations in endogenous SPL. Such methods and kits may be used to detect the presence of a cancer or to evaluate the prognosis of a known disease. SPL polypeptides, polynucleotides and antibodies are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 5 OF 9 USPATFULL on STN  
ACCESSION NUMBER: 2003:142956 USPATFULL  
TITLE: Sphingosine-1-phosphate lyase polypeptides,  
polynucleotides and modulating agents and methods of  
use therefor  
INVENTOR(S): Saba, Julie D., Oakland, CA, United States

PATENT ASSIGNEE(S): Children's Hospital Oakland Research Institute,  
Oakland, CA, United States (U.S. corporation)

NUMBER KIND DATE

-----  
PATENT INFORMATION: US 6569666 B1 20030527  
APPLICATION INFO.: US 1999-356643 19990719 (9)  
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1997-939309, filed  
on 29 Sep 1997, now patented, Pat. No. US 6423527  
DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Prouty, Rebecca E.  
ASSISTANT EXAMINER: Ramirez, Delia M  
LEGAL REPRESENTATIVE: Seed IP Law Group PLLC  
NUMBER OF CLAIMS: 1  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 28 Drawing Figure(s); 26 Drawing Page(s)  
LINE COUNT: 2126  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer are provided. Therapeutic compositions may comprise agents that modulate the expression or activity of a sphingosine-1-phosphate lyase (SPL). Such compositions may be administered to a mammal afflicted with cancer. Diagnostic methods and kits may employ an agent suitable for detecting alterations in endogenous SPL. Such methods and kits may be used to detect the presence of a cancer or to evaluate the prognosis of a known disease. SPL polypeptides, polynucleotides and antibodies are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 6 OF 9 MEDLINE on STN DUPLICATE 1  
ACCESSION NUMBER: 2001519664 MEDLINE  
DOCUMENT NUMBER: PubMed ID: 11566853  
TITLE: Sphingosine-1-phosphate lyase has a central role in the  
development of Dictyostelium discoideum.  
AUTHOR: Li G; Foote C; Alexander S; Alexander H  
CORPORATE SOURCE: Division of Biological Sciences, University of Missouri,  
Columbia, MO 65211-7400, USA.  
CONTRACT NUMBER: GM 53929 (NIGMS)  
SOURCE: Development (Cambridge, England), (2001 Sep) Vol. 128, No.  
18, pp. 3473-83.  
Journal code: 8701744. ISSN: 0950-1991.  
PUB. COUNTRY: England: United Kingdom  
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
LANGUAGE: English  
FILE SEGMENT: Priority Journals  
OTHER SOURCE: GENBANK-AF233610  
ENTRY MONTH: 200112  
ENTRY DATE: Entered STN: 20010924  
Last Updated on STN: 20020122  
Entered Medline: 20011204

AB Sphingosine-1-phosphate, a product of sphingomyelin degradation, is an important element of signal transduction pathways that regulate cell proliferation and cell death. We have demonstrated additional roles for sphingosine-1-phosphate in growth and multicellular development. The specific disruption in Dictyostelium discoideum of the \*\*\*sphingosine\*\*\* - \*\*\*[\*\*\* - \*\*\*phosphate\*\*\* \*\*\*lyase\*\*\* \*\*\*gene\*\*\*, which encodes the enzyme that catalyzes \*\*\*sphingosine\*\*\* -1-phosphate degradation, results in a \*\*\*mutant\*\*\* \*\*\*strain\*\*\* with aberrant morphogenesis, as well as an increase in viability during stationary phase. The absence of sphingosine-1-phosphate lyase affects multiple stages throughout development, including the cytoskeletal architecture of aggregating cells, the ability to form migrating slugs, and the control of cell type-specific gene expression and terminal spore differentiation. This pleiotropic effect, which is due to the loss of sphingosine-1-phosphate lyase, establishes sphingolipids as pivotal regulatory molecules in a wide range of processes in multicellular development.

L22 ANSWER 7 OF 9 LIFESCI COPYRIGHT 2006 CSA on STN



ACCESSION NUMBER: 2002:20855 LIFESCI  
 TITLE: Elevation of endogenous sphingolipid long-chain base phosphates kills *Saccharomyces cerevisiae* cells  
 AUTHOR: Zhang, X.; Skrzypek, M.I.; Lester, R.I.; Dickson, R.I.  
 CORPORATE SOURCE: Department of Molecular and Cellular Biochemistry and Lucille P. Markey Cancer Center, University of Kentucky College of Medicine, Lexington, KY 40536, USA  
 SOURCE: Current Genetics [Curr. Genet.], (2001)200 vol. 40, no. 4, pp. 221-233.  
 ISSN: 0172-8083.  
 DOCUMENT TYPE: Journal  
 FILE SEGMENT: G, K  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English

AB \*\*\*Sphingolipid\*\*\* long-chain base phosphates (LCBPs) regulate cell proliferation, movement and differentiation in higher eukaryotes. To study the function of LCBPs in *Saccharomyces cerevisiae*, we inactivated LCBP breakdown pathways. Elimination of both the \*\*\*Dpl1\*\*\* lyase and the Lcb3 phosphatase pathways by \*\*\*gene\*\*\* deletion was lethal, indicating that these enzymes regulate LCBP levels to prevent accumulation. Lethality was prevented by eliminating the major LCB kinase, Lcb4p, which synthesizes LCBPs, but not by eliminating the minor LCB kinase, Lcb5p. These data imply that death results from an accumulation of LCBPs made by the Lcb4p kinase. By regulating Lcb4 kinase activity, we found that cell death correlates with LCBP accumulation and that C sub(18) dihydrosphingosine-1-P (DHS-P) and C sub(20) DHS-P are most likely the killing molecules. LCB levels were found to be most elevated in a strain lacking Lcb4 kinase, \*\*\*Dpl1\*\*\* lyase and Lcb3 phosphatase activity. Analysis of \*\*\*mutant\*\*\* \*\*\*strains\*\*\* suggests that the C sub(18) and C sub(20) species of LCBPs are preferentially degraded by the Lcb3 phosphate phosphatase, while the \*\*\*Dpl1\*\*\* lyase prefers C sub(16) DHS-P as a substrate. These and other data indicate the existence of an unknown mechanism(s) for regulating LCB levels. Our results demonstrate that LCBPs may be used in some circumstances to regulate yeast cell growth.

L22 ANSWER 8 OF 9 LIFESCI COPYRIGHT 2006 CSA on STN DUPLICATE 2

ACCESSION NUMBER: 2001:32114 LIFESCI  
 TITLE: Molecular basis for resistance to the anticancer drug cisplatin in *Dictyostelium*  
 AUTHOR: Li, Guochun; Alexander, H.; Schneider, N.; Alexander, S.\*  
 CORPORATE SOURCE: Division of Biological Sciences, University of Missouri, Columbia, MO 65211, USA; E-mail: alexanderst@missouri.edu  
 SOURCE: Microbiology, (2000)900 vol. 146, no. 9, pp. 2219-2227.  
 ISSN: 1350-0872.  
 DOCUMENT TYPE: Journal  
 FILE SEGMENT: K  
 LANGUAGE: English  
 SUMMARY LANGUAGE: English

AB The efficacy of the widely used chemotherapeutic drug cisplatin is limited by the occurrence of drug-resistant tumour cells. To fully exploit the potential of this drug in cancer therapy, it is imperative to understand the molecular basis of cisplatin resistance. Using an insertional mutagenesis technique in cells of *Dictyostelium discoideum*, we have identified six genes which are involved in cisplatin resistance. None of these genes has been previously linked to resistance to this drug. Several of these genes encode proteins that are involved in signal transduction pathways which regulate cell death, cell proliferation or \*\*\*gene\*\*\* regulation. The resistance of these \*\*\*mutant\*\*\* \*\*\*strains\*\*\* is specific for cisplatin, since deletion of these genes does not confer resistance to other DNA-damaging agents. Significantly, the disruption of three of these genes, encoding the \*\*\*sphingosine\*\*\* - \*\*\*1\*\*\* - \*\*\*phosphate\*\*\* \*\*\*lyase\*\*\*, the RegA cAMP phosphodiesterase and a phosphatidylinositol-4-phosphate 5-kinase, also results in abnormalities in the multicellular development of this organism, although there is no change in the rate of mitotic cell growth. This study has identified previously unsuspected molecular pathways which function in the cellular response to cisplatin and are required for normal morphogenesis, and underscores the complexity of the cellular response to cisplatin. These pathways provide potential targets for modulating the response to this

important drug.

L22 ANSWER 9 OF 9 LIFESCI COPYRIGHT 2006 CSA on STN DUPLICATE 3

ACCESSION NUMBER: 2000:80383 LIFESCI

TITLE: Identification of the First Mammalian Sphingosine Phosphate  
Lyase Gene and Its Functional Expression in Yeast

AUTHOR: Zhou, J.; Saba, J.D.\*

CORPORATE SOURCE: Children's Hospital Oakland Research Institute, Oakland,  
94609, California

SOURCE: Biochemical and Biophysical Research Communications,  
(19980126) vol. 242, no. 3, pp. 502-507.  
ISSN: 0006-291X.

DOCUMENT TYPE: Journal

FILE SEGMENT: K

LANGUAGE: English

SUMMARY LANGUAGE: English

AB \*\*\*Sphingosine\*\*\* -1-phosphate (S-1-P) has been shown to participate in  
the proliferative signal transduction pathways of mammalian cells.

\*\*\*Sphingosine\*\*\* - \*\*\*1\*\*\* - \*\*\*phosphate\*\*\* \*\*\*lyase\*\*\* (SPL)

catalyzes the breakdown of S-1-P. Using the C. elegans SPL nucleotide

\*\*\*sequence\*\*\*, we identified a mouse EST as a putative candidate for

the homologous \*\*\*gene\*\*\* encoding this enzyme. Sequencing of the

mouse EST revealed an open reading frame of 1707 nucleotides. This

putative mouse SPL \*\*\*gene\*\*\* is 62% similar and 39% identical to the

C. elegans SPL \*\*\*gene\*\*\* and 59% homologous and 39.6% identical to

the yeast SPL \*\*\*gene\*\*\*. Expression of the mouse SPL \*\*\*gene\*\*\*

in a \*\*\*yeast\*\*\* \*\*\*strain\*\*\* - Delta bst1, which carries a

deletion of the SPL \*\*\*gene\*\*\* and is hypersensitive to

\*\*\*sphingosine\*\*\*, restored a \*\*\*sphingosine\*\*\* -resistant phenotype,

suggesting this mouse \*\*\*gene\*\*\* can functionally complement the yeast

defect when expressed. In vitro enzyme assay using extracts from these

\*\*\*sphingosine\*\*\* -resistant transformants confirmed the SPL activities

encoded by this mouse cDNA \*\*\*clone\*\*\*. Northern analysis indicated

the mouse SPL \*\*\*gene\*\*\* is expressed at various levels in different

tissues. Chromosomal localization mapped this SPL \*\*\*gene\*\*\* to

Chromosome 10 at 32 cM. Here, we report the identification of the first

mammalian \*\*\*sphingosine\*\*\* phosphate lyase \*\*\*gene\*\*\*.

=> d ibib abs L23 1-3

L23 ANSWER 1 OF 4 USPATFULL on STN

ACCESSION NUMBER: 2005:254852 USPATFULL

TITLE: Sphingosine-1-phosphate lyase polypeptides,  
polynucleotides and modulating agents and methods of  
use therefor

INVENTOR(S): Saba, Julie D., Oakland, CA, UNITED STATES

Fyrst, Henrik, Alameda, CA, UNITED STATES

PATENT ASSIGNEE(S): Children's Hospital & Research Institute at Oakland,  
Oakland, CA, UNITED STATES (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2005221346 A1 20051006

APPLICATION INFO.: US 2004-979085 A1 20041101 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2002-53510, filed on 17 Jan  
2002, GRANTED, Pat. No. US 6830881 Continuation-in-part  
of Ser. No. US 1999-356643, filed on 19 Jul 1999,  
GRANTED, Pat. No. US 6569666 Continuation-in-part of  
Ser. No. US 1997-939309, filed on 29 Sep 1997, GRANTED,  
Pat. No. US 6423527

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH  
AVE, SUITE 6300, SEATTLE, WA, 98104-7092, US

NUMBER OF CLAIMS: 6

EXEMPLARY CLAIM: 1-29

LINE COUNT: 3225

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer are

provided. Therapeutic compositions may comprise agents that modulate the expression or activity of a sphingosine-1-phosphate lyase (SPL). Such compositions may be administered to a mammal afflicted with cancer. Diagnostic methods and kits may employ an agent suitable for detecting alterations in endogenous SPL. Such methods and kits may be used to detect the presence of a cancer or to evaluate the prognosis of a known disease. SPL polypeptides, polynucleotides and antibodies are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 2 OF 4 USPATFULL on STN

ACCESSION NUMBER: 2004:165347 USPATFULL

TITLE: Compositions and methods for the modulation of  
sphingolipid metabolism and/or signaling

INVENTOR(S): Saba, Julie D., Oakland, CA, UNITED STATES

PATENT ASSIGNEE(S): Children's Hospital and Research Institute at Oakland,  
Oakland, CA (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2004126834 A1 20040701

APPLICATION INFO.: US 2003-622011 A1 20030716 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-348052, filed  
on 17 Jan 2003, PENDING Continuation-in-part of Ser.  
No. US 2002-53510, filed on 17 Jan 2002, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 2002-349582P 20020117 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH  
AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: 31

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 5 Drawing Page(s)

LINE COUNT: 7285

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer and  
muscular disorders are provided. Therapeutic compositions may comprise  
agents that modulate sphingolipid metabolism and/or signaling pathways.  
Such compositions may be administered to a mammal afflicted with cancer.  
Diagnostic methods and kits may employ an agent suitable for detecting  
alterations in endogenous genes involved in sphingolipid metabolism.  
Such methods and kits may be used to detect the presence of a cancer or  
to evaluate the prognosis of a known disease. Screens for identifying  
agents that modulate sphingolipid metabolism and/or signaling pathways  
are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L23 ANSWER 3 OF 4 USPATFULL on STN

ACCESSION NUMBER: 2003:312185 USPATFULL

TITLE: Compositions and methods for the modulation of  
sphingolipid metabolism and/or signaling

INVENTOR(S): Saba, Julie D., Oakland, CA, UNITED STATES

Fyrst, Henrik, Alameda, CA, UNITED STATES

PATENT ASSIGNEE(S): Children's Hospital & Research Institute at Oakland,  
Oakland, CA, UNITED STATES, 94609-1673 (non-U.S.  
corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2003219782 A1 20031127

APPLICATION INFO.: US 2003-348052 A1 20030117 (10)

NUMBER DATE

PRIORITY INFORMATION: US 2002-349582P 20020117 (60)

DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH  
AVE, SUITE 6300, SEATTLE, WA, 98104-7092  
NUMBER OF CLAIMS: 50  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 3 Drawing Page(s)  
LINE COUNT: 5792

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer and muscular disorders are provided. Therapeutic compositions may comprise agents that modulate sphingolipid metabolism and/or signaling pathways. Such compositions may be administered to a mammal afflicted with cancer. Diagnostic methods and kits may employ an agent suitable for detecting alterations in endogenous genes involved in sphingolipid metabolism. Such methods and kits may be used to detect the presence of a cancer or to evaluate the prognosis of a known disease. SPL polypeptides, polynucleotides and antibodies are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d ibib abs L24 1-3

L24 ANSWER 1 OF 3 USPATFULL on STN  
ACCESSION NUMBER: 2004:165347 USPATFULL  
TITLE: Compositions and methods for the modulation of  
sphingolipid metabolism and/or signaling  
INVENTOR(S): Saba, Julie D., Oakland, CA, UNITED STATES  
PATENT ASSIGNEE(S): Children's Hospital and Research Institute at Oakland,  
Oakland, CA (U.S. corporation)

NUMBER KIND DATE

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PATENT INFORMATION: US 2004126834 A1 20040701  
APPLICATION INFO.: US 2003-622011 A1 20030716 (10)  
RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-348052, filed  
on 17 Jan 2003, PENDING Continuation-in-part of Ser.  
No. US 2002-53510, filed on 17 Jan 2002, PENDING

NUMBER DATE

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PRIORITY INFORMATION: US 2002-349582P 20020117 (60)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH  
AVE, SUITE 6300, SEATTLE, WA, 98104-7092  
NUMBER OF CLAIMS: 31  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 5 Drawing Page(s)  
LINE COUNT: 7285

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer and muscular disorders are provided. Therapeutic compositions may comprise agents that modulate sphingolipid metabolism and/or signaling pathways. Such compositions may be administered to a mammal afflicted with cancer. Diagnostic methods and kits may employ an agent suitable for detecting alterations in endogenous genes involved in sphingolipid metabolism. Such methods and kits may be used to detect the presence of a cancer or to evaluate the prognosis of a known disease. Screens for identifying agents that modulate sphingolipid metabolism and/or signaling pathways are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L24 ANSWER 2 OF 3 USPATFULL on STN  
ACCESSION NUMBER: 2003:312185 USPATFULL  
TITLE: Compositions and methods for the modulation of  
sphingolipid metabolism and/or signaling  
INVENTOR(S): Saba, Julie D., Oakland, CA, UNITED STATES

Fyrst, Henrik, Alameda, CA, UNITED STATES  
PATENT ASSIGNEE(S): Children's Hospital & Research Institute at Oakland,  
Oakland, CA, UNITED STATES, 94609-1673 (non-U.S.  
corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2003219782 A1 20031127  
APPLICATION INFO.: US 2003-348052 A1 20030117 (10)

NUMBER DATE

PRIORITY INFORMATION: US 2002-349582P 20020117 (60)  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION  
LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH  
AVE, SUITE 6300, SEATTLE, WA, 98104-7092  
NUMBER OF CLAIMS: 50  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 3 Drawing Page(s)  
LINE COUNT: 5792  
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer and  
muscular disorders are provided. Therapeutic compositions may comprise  
agents that modulate sphingolipid metabolism and/or signaling pathways.  
Such compositions may be administered to a mammal afflicted with cancer.  
Diagnostic methods and kits may employ an agent suitable for detecting  
alterations in endogenous genes involved in sphingolipid metabolism.  
Such methods and kits may be used to detect the presence of a cancer or  
to evaluate the prognosis of a known disease. SPL polypeptides,  
polynucleotides and antibodies are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L24 ANSWER 3 OF 3 LIFESCI COPYRIGHT 2006 CSA on STN DUPLICATE 1

ACCESSION NUMBER: 2002:20855 LIFESCI

TITLE: Elevation of endogenous sphingolipid long-chain base  
phosphates kills *Saccharomyces cerevisiae* cells

AUTHOR: Zhang, X.; Skrzypek, M.I.; Lester, R.I.; Dickson, R.I.

CORPORATE SOURCE: Department of Molecular and Cellular Biochemistry and  
Lucille P. Markey Cancer Center, University of Kentucky  
College of Medicine, Lexington, KY 40536, USA

SOURCE: Current Genetics [Curr. Genet.], (2001)2001 vol. 40, no. 4,  
pp. 221-233.

ISSN: 0172-8083.

DOCUMENT TYPE: Journal

FILE SEGMENT: G; K

LANGUAGE: English

SUMMARY LANGUAGE: English

AB \*\*\*Sphingolipid\*\*\* long-chain base phosphates (LCBPs) regulate cell  
proliferation, movement and differentiation in higher eukaryotes. To study  
the function of LCBPs in *Saccharomyces cerevisiae*, we inactivated LCBP  
breakdown pathways. Elimination of both the Dpl1 lyase and the Lcb3  
phosphatase pathways by \*\*\*gene\*\*\* deletion was lethal, indicating  
that these enzymes regulate LCBP levels to prevent accumulation. Lethality  
was prevented by eliminating the major LCB kinase, Lcb4p, which  
synthesizes LCBPs, but not by eliminating the minor LCB kinase, Lcb5p.  
These data imply that death results from an accumulation of LCBPs made by  
the Lcb4p kinase. By regulating \*\*\*Lcb4\*\*\* kinase activity, we found  
that cell death correlates with LCBP accumulation and that C sub(18)  
dihydrosphingosine-1-P (DHS-P) and C sub(20) DHS-P are most likely the  
killing molecules. LCB levels were found to be most elevated in a strain  
lacking \*\*\*Lcb4\*\*\* kinase, Dpl1 lyase and Lcb3 phosphatase activity.  
Analysis of \*\*\*mutant\*\*\* \*\*\*strains\*\*\* suggests that the C sub(18)  
and C sub(20) species of LCBPs are preferentially degraded by the Lcb3  
phosphate phosphatase, while the Dpl1 lyase prefers C sub(16) DHS-P as a  
substrate. These and other data indicate the existence of an unknown  
mechanism(s) for regulating LCB levels. Our results demonstrate that LCBPs  
may be used in some circumstances to regulate yeast cell growth.

=> d ibib abs L9

L9 ANSWER 1 OF 1 USPATFULL on STN

ACCESSION NUMBER: 2004:165347 USPATFULL

TITLE: Compositions and methods for the modulation of  
sphingolipid metabolism and/or signaling

INVENTOR(S): Saba, Julie D., Oakland, CA, UNITED STATES

PATENT ASSIGNEE(S): Children's Hospital and Research Institute at Oakland,  
Oakland, CA (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2004126834 A1 20040701

APPLICATION INFO.: US 2003-622011 A1 20030716 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-348052, filed  
on 17 Jan 2003, PENDING Continuation-in-part of Ser.  
No. US 2002-53510, filed on 17 Jan 2002, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 2002-349582P 20020117 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH  
AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: 31

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 5 Drawing Page(s)

LINE COUNT: 7285

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer and  
muscular disorders are provided. Therapeutic compositions may comprise  
agents that modulate sphingolipid metabolism and/or signaling pathways.  
Such compositions may be administered to a mammal afflicted with cancer.  
Diagnostic methods and kits may employ an agent suitable for detecting  
alterations in endogenous genes involved in sphingolipid metabolism.  
Such methods and kits may be used to detect the presence of a cancer or  
to evaluate the prognosis of a known disease. Screens for identifying  
agents that modulate sphingolipid metabolism and/or signaling pathways  
are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d ibib abs L21

L21 ANSWER 1 OF 1 USPATFULL on STN

ACCESSION NUMBER: 2004:165347 USPATFULL

TITLE: Compositions and methods for the modulation of  
sphingolipid metabolism and/or signaling

INVENTOR(S): Saba, Julie D., Oakland, CA, UNITED STATES

PATENT ASSIGNEE(S): Children's Hospital and Research Institute at Oakland,  
Oakland, CA (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION: US 2004126834 A1 20040701

APPLICATION INFO.: US 2003-622011 A1 20030716 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2003-348052, filed  
on 17 Jan 2003, PENDING Continuation-in-part of Ser.  
No. US 2002-53510, filed on 17 Jan 2002, PENDING

NUMBER DATE

PRIORITY INFORMATION: US 2002-349582P 20020117 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH  
AVE, SUITE 6300, SEATTLE, WA, 98104-7092

NUMBER OF CLAIMS: 31  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 5 Drawing Page(s)  
LINE COUNT: 7285

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions, methods and kits for diagnosing and treating cancer and muscular disorders are provided. Therapeutic compositions may comprise agents that modulate sphingolipid metabolism and/or signaling pathways. Such compositions may be administered to a mammal afflicted with cancer. Diagnostic methods and kits may employ an agent suitable for detecting alterations in endogenous genes involved in sphingolipid metabolism. Such methods and kits may be used to detect the presence of a cancer or to evaluate the prognosis of a known disease. Screens for identifying agents that modulate sphingolipid metabolism and/or signaling pathways are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

L1 QUE ((MUTANT(W) YEAST(W) STRAIN#) OR (MUTANT(W) STRAIN#) OR (YE

L2 154230 S L1  
L3 351 S (SPHINGOLIPID# OR SPHINGO?)(S)L2  
L4 5440 S (SPHK1 OR SK1 OR (SPHINGOSINE(W)KINASE?))  
L5 4 S L3(S)L4  
L6 970 S (GENE OR SEQUENCE OR POLYNUCLEOTIDE OR CLONE OR RECOMBINANTX  
L7 442 S EXPRESS?(S)L6  
L8 234 S (SPHINGOLIPID# OR SPHINGO?)(S)L7  
L9 1 S L8(S)L2  
L10 442 S ((DIHYDROSPHINGOSINE-1-PHOSPHATE(W)LYASE) OR (SPHINGOSINE-1-P  
L11 172 S (GENE OR SEQUENCE OR POLYNUCLEOTIDE OR CLONE OR RECOMBINANTX  
L12 21 S L2(S)L11  
L13 21 S (SPHINGOLIPID# OR SPHINGO?)(S)L12  
L14 94558 S ((SPHINGOSINE(W)KINASE#)OR SK OR LCB4)  
L15 16881 S (GENE OR SEQUENCE OR POLYNUCLEOTIDE OR CLONE OR RECOMBINANTX  
L16 463 S (SPHINGOLIPID# OR SPHINGO?)(S)L15  
L17 5 S L16(S)L2  
L18 223 S ((SPHINGOSINE-1-PHOSPHATE(W)PHOSPHATASE#) OR (DIHYDROSPHINGO  
L19 44 S (GENE OR SEQUENCE OR POLYNUCLEOTIDE OR CLONE OR RECOMBINANTX  
L20 37 S (SPHINGOLIPID# OR SPHINGO?)(S)L19  
L21 1 S L20(S)L2  
L22 9 DUP REM L13 (12 DUPLICATES REMOVED)  
L23 4 DUP REM L5 (0 DUPLICATES REMOVED)  
L24 3 DUP REM L17 (2 DUPLICATES REMOVED)

=> log y